Platystomatidae), given by David Clements, and on the preparation and examination of Diptera genitalia, given by Dr John Deeming. Dr Stuart Ball also gave a demonstration of the new 'Recorder' software package, and various computer developments including 'Syrph the Net', a hoverfly web-site run by Dr Martin Speight. The remainder of the day was taken up with informal discussion and identification of specimens, with many members making use of the large British and foreign Diptera collections held by the museum.

Altogether it was a very successful and well-attended event, made the more so by the excellent facilities provided by the museum and the university. Grateful thanks are extended to Mike Wilson, John Deeming and the staff of the museum, Dr Mark Jervis and the catering service at the University of Wales, Diane Henshaw, Ian and Julie Johnson and all of the presentation and workshop contributors. The event was organised by David Clements, and Anne Clements and Mark Pavett very kindly helped out on the day.

SHORT COMMUNICATION

Rearing *Dahlica triquetrella* (Hübner) (Lepidoptera: Psychidae).—On 18.iii.1997 Dennis O'Keeffe sent me some pupae of the local psychid *Dahlica triquetrella* from a site near Orpington in Kent. This moth has a very localised distribution in the British Isles, being known only from West Kent (VC 16) (where these pupae came from) and Westmorland and North Lancashire (VC 69) (*MBGBI* **2**: 135). In the UK it reproduces parthenogenetically, only apterous females being known, although winged males occur in continental Europe. The larvae construct portable cases which they enlarge as they grow, camouflaging the exterior with sand, frass, dead insects and plant debris. Pupation occurs in the larval case and the female moths lay their ova in the old case beneath their pupal exuviae.

A total of 8 adult moths hatched between the 1 and 10.iv.1997, always very early in the morning. They immediately proceeded to lay ova in their old larval cases. Indeed it proved hard to prevent oviposition due to the early hour of their eclosion. I retained the ova but did not expect to be able to rear any resultant larvae past their first instar.

A total of 212 larvae (average approximately 26 per adult) hatched between 24 and 30.iv.1997. In an attempt to rear these I prepared two Perspex larval boxes with a 2 cm layer of finely sieved John Innes No. 3 potting compost and pieces of dead bark with a growth of the lichen *Lecanora conizaeoides* and terrestrial epiphytic algae of the genus *Diplococcus*. The larvae were placed on the bark but soon wandered off onto the sieved compost. Here they constructed miniature elongate silken cases, roughly triangular in cross section and coated externally with dusty soil particles.

Evidence of their feeding on the lichen and algae, in the form of faecal pellets, was hard to find. However, some green-coloured frass was eventually located but it soon became apparent that the larvae had little or no interest in the algae as a pabulum. Consequently I added some dead dried micromoths to their boxes and almost immediately the larvae began feeding on these. Before long, each piece of moth thorax and abdomen was ringed with larval cases, the minute larvae were evident protruding from these and struggling to attain a position from which to feed. To prevent desiccation I sprayed the larvae about every 10 to 15 days with a fine mist of water, but feeding them on freshly killed insects reduced the need for this and the subsequent risk of mould developing in the damp atmosphere.

I kept the larvae indoors all year in an unheated room with a natural photoperiod. However, the temperature of this room was considerably higher than environmental temperatures for at least seven or eight months of the year (October to May). They fed up slowly, enlarging their cases and decorating these with sand, peat, frass and parts of dead insects (mostly legs and elytra). The larvae showed a marked preference for Lepidoptera, Hemiptera (especially smelly shield bugs) and most Coleoptera with the exception of red and black ladybirds (7 spot) which they actively avoided. Diptera, in the form of crane flies, were also eaten, but not avidly.

The sieved peat was renewed in July 1997 as there was evidence of infestation by mites. New pieces of bark were included to provide a solid substrate for the larvae to crawl on. This procedure was repeated in December for the same reason.

Second instar larvae were seen on 26.v. third instars on 19.vii. and fourth instars on 5.viii. Final instar (fifth) larvae were evident on 26.viii.1997. These stages were separated on the basis of their head capsule sizes. Late in October the larvae began to climb the walls of their boxes and attach their cases loosely to the angles of the lids and to the walls. Others were found loosely attached and hanging from the undersides of pieces of bark. Once attached in this way they remained without feeding, despite fresh food being added periodically over the winter. In January the larvae began to perambulate and on the 12th of that month I opened five cases and found that all still contained larvae. By late February 1998 most larvae had attached their cases firmly with white silk to the wood and box lids and on opening one case I found it contained a pupa.

In an attempt to stimulate pupation and eclosion of the adults, about this time I left the boxes exposed to bright sunlight indoors. This was a mistake as many mortalities occurred due to over-heating. Despite this, adults began to emerge on 20.ii. and by 23.iii. 1998 a total of ten females had emerged.

Due to the females' urge to oviposit immediately post eclosion, and assuming an average brood size of 25 ova per female, I estimated that these ten adults would produce around 250 ova. Larvae began to hatch on 4.iv., and by 20.iv. a total of around 200 had emerged. It is interesting to note that the timing of the life cycle stages of this species were unaffected by the larvae being kept in captivity. Adults emerged from reared pupae at the same time of year as those from wild pupae. Oviposition and larval eclosion were similarly timed too, despite the temperature of the room the larvae were reared in being higher than environmental temperatures for most of the year. This indicates that the duration of these various stages in this species is probably influenced more strongly by photoperiod than by temperature.

I attempted to feed the F_2 larvae on dead insects as before but this time was unsuccessful. I found that all the larvae had died in their first instar, two or three days after I had fed them with two freshly killed adult green shield bugs *Palomena prasina* (L.) from my garden. I can only presume that the bugs contained some toxin that killed the larvae, as a killing agent had not been used. Fortunately I did not attempt to feed the F_1 larvae on this species of bug.—I. SIMS, 2 The Delph, Lower Earley, Reading, Berkshire RG6 3AN.